Basic Firing Data

- **Terminal and Enabling Learning Objectives in PE Book - page 20**

- **OBJECTIVE: To Determine Basic Firing Data**

Basic Firing Data

THE COMPUTER has one of the most important jobs in the FDC.

To Combine data provided from other members of the FDC.

FDO/OPSCHIEF – FIRE ORDER

HCO – CHT DATA VCO – SITE

Det'm and announce FIRING DATA and FIRE COMMANDS.

Record MSN RELATED DATA and other info as directed.

ELEMENTS OF BASIC FIRING DATA

- **Projectile - the device that carries the payload to the target.**
- **Charge - is the amount of propellant that is required to propel the projectile to the target.**
- **Fuze and Fuze Setting - the fuze is a mechanical or electrical device that causes the projectile to burst or expel its payload.**
- **Deflection - the direction the gun must be pointed at, laid on, to engage the target.**
- **Quadrant Elevation - is the angle in the vertical plane that the tube must be elevated to engage the target.**

PROJECTILE

- Two Type of Projectiles
- Burster - HE / WP
- Base Ejecting - DPICM / Illumination

- The projectile may carry a filler such as high explosive in the HE.
- White phosphorous in WP.
- Sub-munitions as in DPICM or Illumination that are ejected from the base of projectile over the target.

CHARGE

- The form in which the propellant is packaged depends upon the type of ammunition:
- **FIXED AMMUNITION:** contains the pre-measured charge that can not be varied inside a cartridge. Tank Ammunition
- **SEMI-FIXED AMMUNITION:** consists of a cartridge case that contains the powder charge. The charge is divided into increments inside of cloth bags. The cartridge is not permanently assembled and allows the propelling charge to be varied to achieve different ranges. Number of increments defines the charge. M101 (105mm) Howitzer
- **SEPARATE LOADING:** ammunition contains no cartridge case. The projectile is loaded separate from propellant. The number of increments or charge bags will define the charge. M198

FUZE AND FUZE SETTING

- There are many fuzes but, they are grouped together as:

- Quick - fuzes that function on impact and are used with bursting type projectiles. Quick fuzes requires no fuze setting. Has an optional setting, delay which has a .05 sec delay. Concrete piercing fuzes are also considered as quick fuzes. Examples; M739 and M557
- Time - are used on bursting and base ejecting projectiles. Those used on bursting projectiles usually contain a super-quick backup that causes the fuze to function on impact. Examples; M564/M582 (Burster), M577 (Base Ejecting)
- Variable Time - contain a radio transmitter and receiver that allows the fuze to function at a predetermined height of burst (7 meters). Examples; M732 and M728

DEFLECTION AND QUADRANT ELEVATION

- **Deflection - the direction the gun must be pointed at, laid on, to engage the target.**

- **Quadrant Elevation - is the algebraic sum of the angle of elevation and site.**

Questions

TABULAR FIRING TABLE (TFT)

- Provided for each weapon and projectile family that a weapon is able to fire.
- Projectile family is a group of projectiles whose ballistics are sufficiently similar to allow them to be fires with the same firing data.
- Identified by caliber and letter designation listed in the top right corner of the cover. 155 Caliber, AM-2 Revision
- Weapons system for which the TFT may be used are listed next. For Cannon, 155MM Howitzer, M185 on
- FIRING - covers the list of projectiles that the TFT provides data for.
- FT 155-AM-2, Base TFT for the M107 family of projectiles
- The TFT is divided into four parts
- INTRODUCTION, FIRE CONTROL INFORMATION (FCI), ILLUMINATION, APPENDICES
- FM 6-40, page 7-1

TFT is Based off the Standard

Conditions of WEATHER

- AIR TEMPERATURE 100% (59 °F)
- AIR DENSITY 100% (1225 gm/m³) *grams per cubic meter
- NO WIND

POSITION

- GUN, TARGET, AND MDP AT SAME ALTITUDE
- ACCURATE RANGE
- NO ROTATION OF THE EARTH

MATERIAL

- STANDARD WEAPON, PROJECTILE, AND FUZE
- PROPELLANT TEMPERATURE 70 °F
- LEVEL TRUNNIONS AND PRECISION SETTINGS
- FIRING TABLE MUZZLE VELOCITY
- NO DRIFT

FM 6-40 Page 7-1 change 1.

TFT IS BASED OFF STANDARD CONDITIONS FROM ACTUAL AND COMPUTED FIRINGS

- Principle elements measured in experimental firings.
- Angle of Elevation
- Angle of Departure
- Muzzle Velocity
- Achieved Range
- Drift
- Concurrent Atmospheric Conditions

- Sufficiently accurate for variation from standard that do not exceed these values.
- Air Density + / - 10 Percent
- Air Temp + / - 10 Percent
- Wind 50 Knot Range or Crosswind component
- Muzzle Velocity + / - 10 meters per second
- Comp Site + / - 50 mil Angle of Site
- Projectile Weight + / - 1 square

FIRST PART: INTRODUCTION

- Contains Data on the Weapons system and Ammunition and the instructions on the use of the TFT to compute data.
- Page II (2) -- Index
- Page III (3) -- Symbols and Abbreviation used in this TFT
- Pages V - VI (5- 6) -- Change in Muzzle Velocity - M/S from the first page of each charge in Part 1
- Pages VII -IX (7 - 9) -- Interchanging of Ammunition with other NATO nations
- Page X (10) -- Weapon Characteristics
- Page XI (11) -- Projectile - Fuze Combinations and Mean Weights

INTRODUCTION "continued"

- Page XII (12) -- Equivalent Service Rounds (will use in Muzzle Velocity Management)
- Page XV (15) -- Approximate Losses in Muzzle Velocity (will use in Muzzle Velocity Management)
- Pages XVI (16) - XXV (25) -- Explanation of Tables and Uses
- Page XXVII (27) - Problems, Interpolation and Expression Rules.
- See C. (1) 1- 4 expresses to 0
- 6 - 9 expresses to 1
- 5 - express to EVEN
- Page XXVIII (28)-- Firing Table Data Argument and Extracted Value
- Page L III (53) -- Charge Selection Table and Probable Error in Range

Part 2 - ILLUMINATION

Beginning on page 411, contains firing data for the ILLUMINATION Projectile, again by charge. Each charge contains table A and B. Will be covered in another period of Instruction - GD29MM -SPECIAL MUNITIONS

APPENDICES

Contain Trajectory Charts that provide data concerning the shape of the trajectory at differing ranges.

Part 1

Contains the

FIRE CONTROL INFORMATION

- Part 1 page 1- 410
- By Propellant type and Charge
- Consists of Tables A through K

- We will cover Tables A - E, and Tables G - K first.
- FM 6-40, page 7-7

TABLE A LINE NUMBER

- ENTRY ARGUMENT: QE
- DETERMINE: MET MESSAGE LINE NUMBER
- GIVEN: QE 315
- DETERMINE: LINE 02

TABLE B
COMPLEMENTARY RANGE LINE NUMBER

- **ENTRY ARGUMENTS:** CHART RANGE (NEAREST 100M)
- **HEIGHT OF TARGET ABOVE GUN** (NEAREST 100M)
- **DETERMINE:** COMPLEMENTARY RANGE

- **GIVEN:** CHART RANGE 5000 Meters, HEIGHT OF TARGET ABOVE GUN: +100 Meters
- **DETERMINE:** +26 Meters

TABLE C
WIND COMPONENTS

- **ENTRY ARGUMENT: CHART DIRECTION OF WIND to the nearest 100 mils**
- **DETERMINE: COMPONENTS OF A ONE KNOT WIND**
- **GIVEN: CHART DIRECTION OF WIND 2000 mils**
- **DETERMINE: CROSS WIND R .92 RANGE WIND T .38**

TABLE D
TEMPERATURE AND DENSITY CORRECTIONS

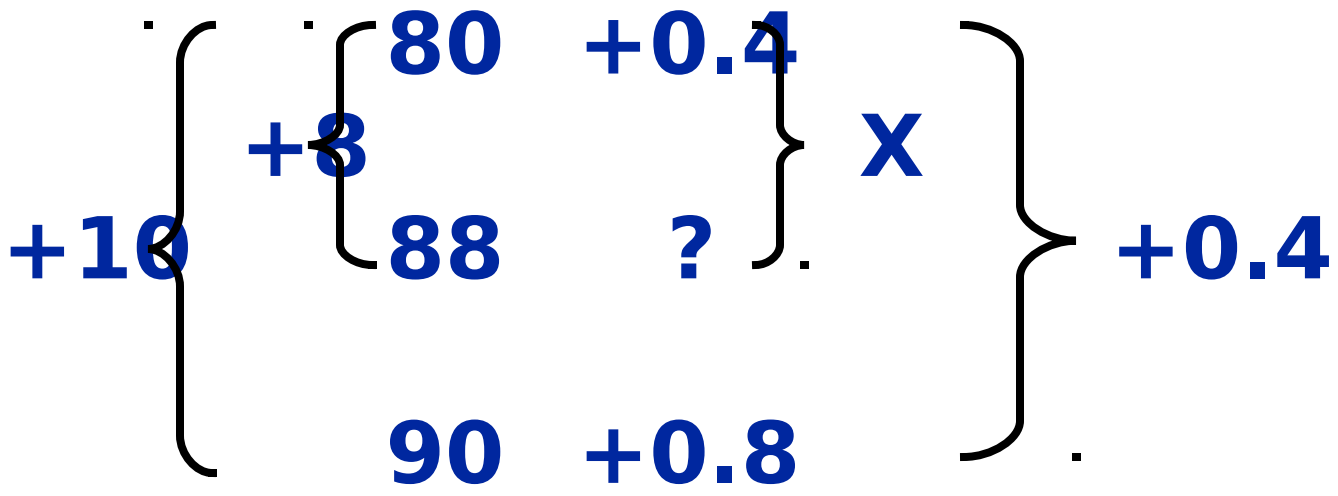
- **ENTRY ARGUMENT: DIFFERENCE IN HEIGHT BETWEEN THE MDP AND THE BATTERY (DH)**
- **DETERMINE: TEMP CORR (DT) AND DENSITY CORR (DD)**
- **GIVEN: DH +130M**
- **DETERMINE: DT -0.3 DD -1.3**

TABLE E
PROPELLANT TEMPERATURE

- **ENTRY ARGUMENT: PROPELLANT TEMPERATURE *(INTERPOLATION REQUIRED)***

- **DETERMINE: EFFECT ON MUZZLE VELOCITY**
- **GIVEN: PROP TEMP 88 °F**
- **DETERMINE THE EFFECT ON THE MUZZLE VELOCITY**

TABLE E
INTERPOLATION



$$\frac{\text{PART}}{\text{WHOLE}} = \frac{\text{X}}{\text{WHOLE}}$$

TABLE E
INTERPOLATION

+8	80	+0.4	X
+10	88	?	+0.4
	90	+0.8	

$$\frac{+8}{+10} = \frac{X}{+0.4}$$

TABLE E
INTERPOLATION

	80	+0.4	
+8			X
+10	88	?	+0.4
	90	+0.8	

$$X = (+8)(+0.4)/+10$$

$$\frac{+8}{+10} \quad \frac{X}{+0.4}$$

TABLE E
INTERPOLATION

	80	+0.4	
+8			X
+10	88	?	+0.4
	90	+0.8	

$$X = (+8)(+0.4)/+10$$

$$X = +3.2/+10$$

$$\frac{+8}{+10} \quad \frac{X}{+0.4}$$

TABLE E
INTERPOLATION

	80	+0.4	
+8			X = +0.3
+10	88	?	+0.4
	90	+0.8	

$$\frac{+8}{+10} \quad \frac{X}{+0.4}$$

$$X = (+8)(+0.4)/+10$$
$$X = +3.2/+10$$
$$X = +0.32 \approx +0.3$$

TABLE E
INTERPOLATION

80	+0.4	
+8		X = +0.3
+10	88	? +0.4
	90	+0.8

$$\frac{+8}{+10} = \frac{X}{+0.4}$$

$$X = (+8)(+0.4)/+10$$

$$X = +3.2$$

$$X = +0.32 \approx +0.3$$

?: (+0.4) + (+0.3) = +0.

TABLE G
SUPPLEMENTARY DATA

- ✓ **ENTRY ARGUMENT: RANGE (NEAREST LISTED)**
- ✓ **DETERMINE: SUPPLEMENTARY DATA**

- ✓ **PROBABLE ERRORS: USED IN LATER INSTRUCTION**
- ✓ **COLUMN 3: PE Range**
- ✓ **COLUMN 4: PE Deflection**
- ✓ **COLUMN 5: PE Height of Burst**
- ✓ **COLUMN 6: PE Time to Burst**
- ✓ **COLUMN 7: PE Range to Burst**
- ✓ **COMP SI FACTOR (COLUMNS 12 & 13) INTERPOLATE TO NEAREST 10M**

TABLE H
ROTATION - RANGE

- **ENTRY ARGUMENTS: RANGE (NEAREST LISTED)**
  DIRECTION OF FIRE (NEAREST LISTED, may not be the azimuth of lay)
- **DETERMINE: RANGE CORRECTION CAUSED BY ROTATION**
- **GIVEN: RANGE 4800M (LOW ANGLE)**
  DIRECTION OF FIRE 0851 mils
- **DETERMINE: RG CORR (-13) MULTIPLY BY THE LATITUDE CORR FACTOR**

TABLE I ROTATION - AZIMUTH

- ENTRY ARGUMENTS: LATITUDE (NEAREST LISTED) RANGE (NEAREST LISTED) DIRECTION OF FIRE (NEAREST LISTED)
- DETERMINE: AZ CORR CAUSED BY ROTATION
- GIVEN: LATITUDE 34 °N RANGE 4800M (LOW ANGLE) DIRECTION OF FIRE 0851 mils
- DETERMINE: L 0.6

TABLE J
FUZE CORRECTION FACTORS

- **ENTRY ARGUMENT: FUZE SETTING (EXPRESSED TO THE WHOLE SECOND)**

- **DETERMINE: FUZE CORRECTION FACTORS**

TABLE K
FUZE SETTING

NOT NORMALLY USED BECAUSE IT IS FOR THE OLD M520A1 TI FUZES

TABLE F
BASIC DATA & CORR FACTORS

- **DETERMINES: BASIC DATA & CORRECTION FACTORS**
- **Based off the standard conditions.**
- **This allows for the correction of data from the measuring of actual conditions and application of the corrections to the TFT data.**
- **Divided into two Parts: Low Angle and High Angle**
- **Page 106, Charge 4G - Range 8100**
- **Divided by ********** (Asterisks)**
- **Above is Low Angle and Below is High Angle**
- **Entry Argument - RANGE (NEAREST 10 METERS) Column 1**

TABLE F BASIC DATA & CORR FACTORS

- **Charge: 4 GB**
- **Range (Col 1): 4100 from HCO (Low Angle)**
- **Elevation (Col 2): 238.6 = (Expressed) 239**
- **FS M564 (Col 3):14.4 Graze Burst Data (will not use)**
- **DFS (Col 4): 0.14 Change in fuze setting to change the HOB of a time fuzed round by 10 Meters**
- **Time of Flight (Col 7): 14.5 = 14, also used to determine VT time, 14.5 vanish the tenths 14 and replace with .0 = 14.0, the M582 fuze setting is also taken from this column. 14.5**
- **Drift (Col 8): 4.4 always Left = L 4.4 = L 4**
- **100/R: a factor in mils applied to Deflection will move the point of impact 100 meters laterally. Applied to QE will move the height of trajectory 100 meters. Not tabulated, determined manually. 100/R = 100 / (Range / 1000) x 1.0186 = 25 (whole mil)**

TABLE F BASIC DATA & CORR FACTORS not used in basic data processing

- Column 5 lists the change in range that is expected corresponding to a 1 mil change in Elevation.
- Column 6 lists Fork, a factor in mils that when added or subtracted will move the point of impact 1/2 (4 PEr) the length of the dispersion pattern. (Covered in Safety.)
- Column 9 through 17 will be covered in Met and Registration
- Column(s) 18 and 19 lists the Projectile Weight change of (1) Square correction in meters.
- QUESTIONS ????

TABLE F
BASIC DATA & CORR FACTORS

- The HCO can determine Chart Range to the accuracy of 10 meters.
- TFT only list the ranges to the accuracy of 100 meters.
- To determine Basic Data corrsponding to intermediate ranges INTERPOLATION is required.
- Given: Range 5030m
- To Determine Elevation (COL 2) Requires INTERPOLATION to Nearest 10 meters.
- All Data determined must be Interpolated. (some data remains the same at two ranges so these will not change and will not need to be interpolated)

TABLE F
INTERPOLATION

.	.	5000	304.5
	+30		X
+100		5030	. ?
		5100	312.3 .

TABLE F
INTERPOLATION

.	.	5000	304.5	
	+30		X	
+100		5030	.	?
		5100	312.3	

$$\frac{+30}{+100} = \frac{X}{+7.8}$$

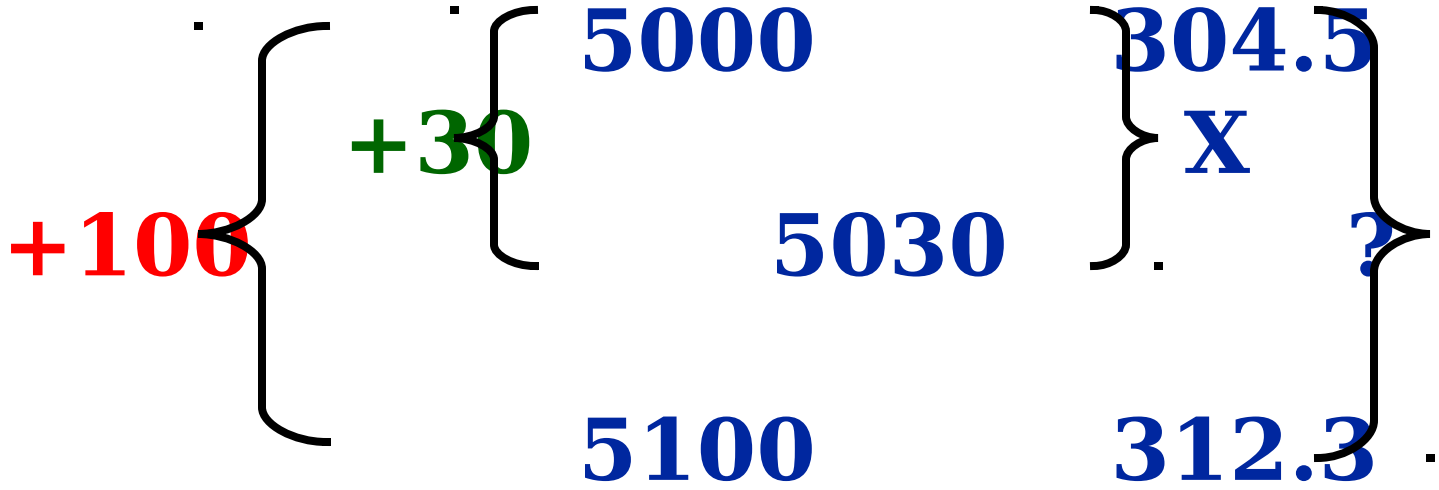
TABLE F
INTERPOLATION

.	.	5000	304.5
	+30		X
+100		5030	. ?
		5100	312.3 .

X = (+30)(+7.8)/+100

$$\frac{+30}{+100} = \frac{X}{+7.8}$$

TABLE F
INTERPOLATION



$$\frac{+30}{+100} = \frac{X}{+7.8}$$

$$X = (+30)(+7.8)/+100$$

$$X = +234/+100$$

TABLE F
INTERPOLATION

.	.	5000	304.5
	+30		X = +2.3
+100		5030	. ?
		5100	312.3 .

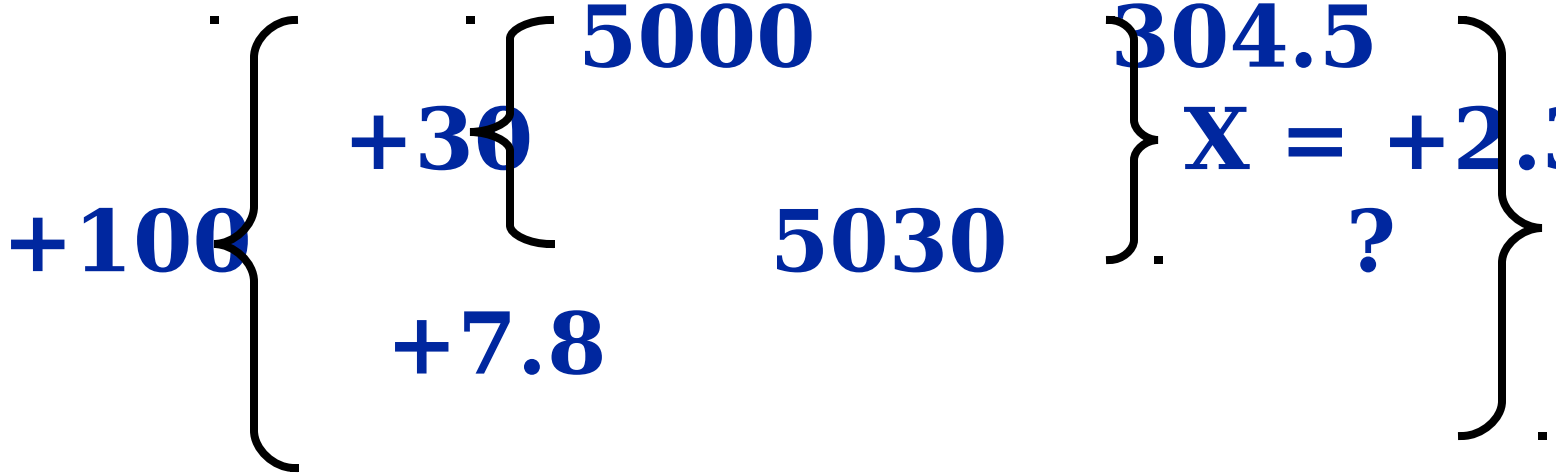
$$\frac{+30}{+100} = \frac{X}{+7.8}$$

X = (+30)(+7.8)/+100

X = +234/+100

X = +2.34 ≈ +2.3

TABLE F
INTERPOLATION



5100 X = (+30)(+7.8)/ 312.3
+100

$$\frac{+30}{+100} = \frac{X}{+7.8}$$

X = +234/+100

X = +2.34 ≈ +2.3

?: 304.5 + (+2.3) =

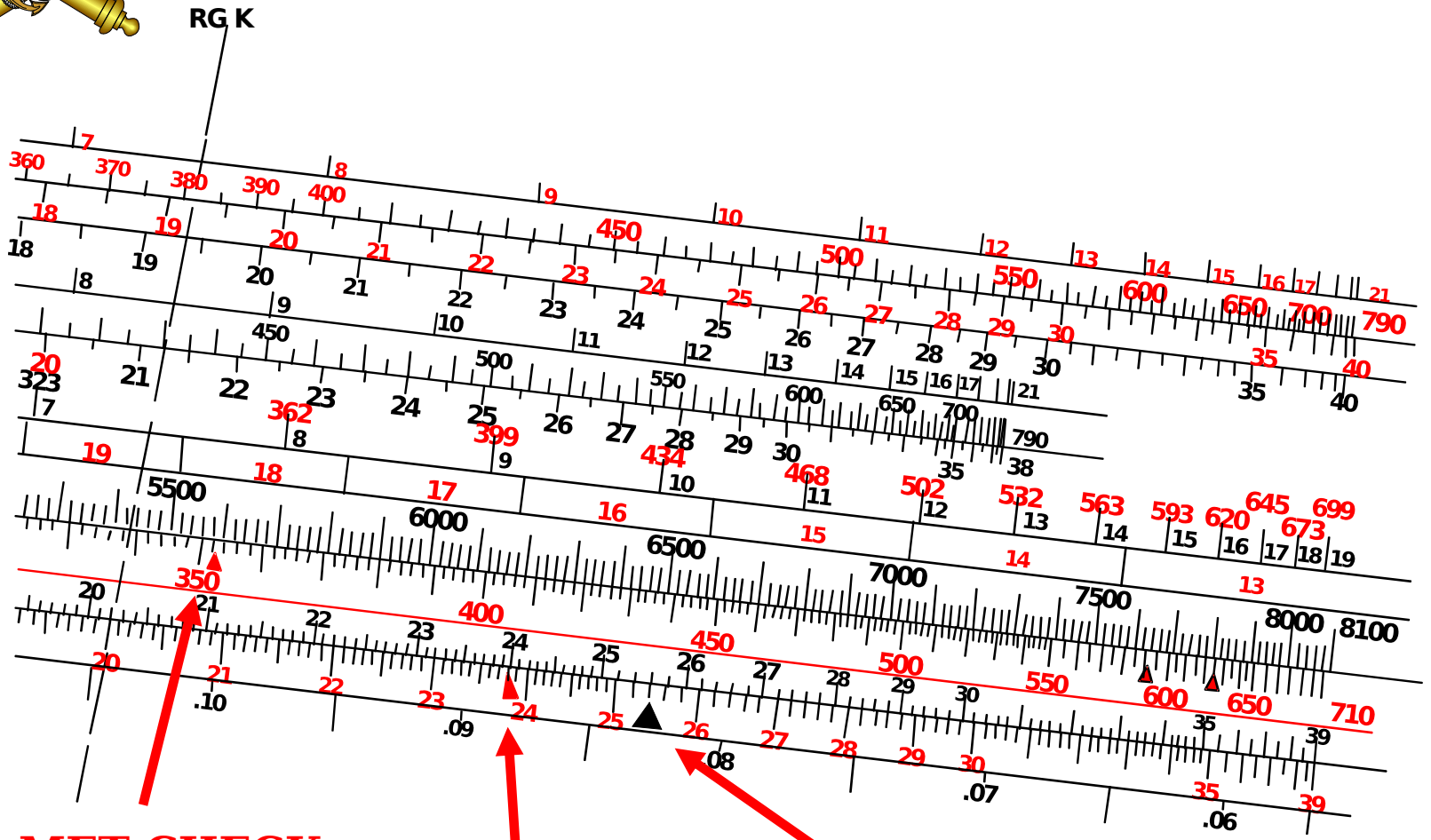
306.8 ≈ 307

TABLE F BASIC DATA & GRAPHICAL FIRING TABLE (GFT)

- Designed to eliminate the difficulties in computing firing data that results from the need to Interpolate.
- Provides all the information needed to compute data in a slide rule form. GFT's are made in (2) parts.
- Rule: wooden base on which the scales are printed.
- Cursor: transparent plastic slide with a manufacturer's hairline (MHL) engraved. The MHL is used to determine the data from the scales.
- Low Angle identified: with Weapon Type - HOW 155 mm TFT the GFT is Based on/Projectile Type - 155AM2HE M107 Charge - CHARGE 4 GB
- High Angle / Illumination GFT's will be covered in GD29MM
- FM 6-40, page 7-25

GRAPHICAL FIRING TABLE (GFT)

- All GFT's are printed with a base scale which represents the data for the base projectile. HE M107
- Supplementary scales may be provided above or below the base scale.
- Drift Scale: Block scale printed in Black, gives the projectile drift in Mils.
- 100/R Scale: number of Mils needed to move the burst laterally/vertically 100 meters.
- Range Scale: Base scale and read to an accuracy of 10 meters.
- Elevation Scale: in mils and read to an accuracy of 1 mil.
- Time of Flight/Fuze Setting M582 Scale: list the time of flights and fuze settings for M582, M577, M732, M728.
- DFS/10 HOB Scale: lists corrections to fuze settings.


RG K
MET CHECK
GAUGE POINT
HOB PE
GAUGE POINT
RANGE PE
GAUGE POINT

GRAPHICAL FIRING TABLE (GFT)

- **Range K Line - geometrically portrays the predicted rate at which the K varies with the range and is a average of many range K values.**
- **Fuze K Line - geometrically portrays the predicted rate at which the Fuze K varies with the range.**
- **Chg 4GB, Range 4100**
- **Elevation: 239**
- **TF/M582: FS = 14.5 / TF = 14 / VT = 14.0**
- **DFS: 0.14**
- **Drift: L 4**
- **100/R: 25**
- **QUESTIONS ?????**

GRAPHICAL FIRING TABLE (GFT) SETTING

- Corrections from a Registration for non-standard conditions.
- Recorded in GFT format: U C A R E T
- U: Unit
- C: Charge
- A: Ammunition Lots used
- R: Range
- E: Elevation (Adjusted)
- T: Time (Adjusted)
- Total Deflection Correction
- GFT Deflection Correction

GRAPHICAL FIRING TABLE (GFT) SETTING

- **Apply a One-Plot GFT Setting:**
- **GFT E: Chg 4, Lot A/G, Rg 4510, El 297, Ti(M582) 16.9**
  Total Df Corr: L 2, GFT Df Corr: R4
- **Place MHL over the range at 4510.**
- **Place a Blue dot over elevation 297.**
- **Move Cursor until blue dot is over the Range K line.**
- **Trace the Range K line on the cursor and label it “EL”.**
- **Place MHL over the range at 4510.**
- **Place a Red dot over M582 time of 16.9.**
- **Move Cursor until red dot is over the Fuze K line.**
- **Trace the Fuze K line on the cursor and label it “TI”.**
- **Record: TOT DF CORR in upper Left corner of the cursor and circle, GFT DF CORR in upper Right of cursor.**

GRAPHICAL FIRING TABLE (GFT) SETTING

- **Determine Data using a GFT Setting: The key to the use of the gage lines is to understand the GFT functions in that any part of data that is caused by another is said to be a function (cause) of the other data.**

Element	Function of
Elevation	Range
100/R	Range
Time of Flight	Elevation
Time (M582)	Elevation
Variable Time (VT)	Elevation
Drift	Elevation
DFS	Fuze Setting

FM 6-40 PG G-1

GRAPHICAL FIRING TABLE (GFT) SETTING

- Rule to use: THREE STEP METHOD
- Step 1: Place the MHL over the Chart Range
- A. Read 100/R under the MHL on the 100/R scale.
- B. Read EL under the EL Gage line on elevation gage line.
- C. Read (M582) TI under the TI Gage line on TF/FS M582.
- Step 2: Place the MHL over the EL determined in step (1).
- A. Read Drift under the MHL.
- B. Read Variable Time (VT) under the MHL.
- C. Read Time of Flight (TOF) under the MHL.
- Step 3: Place the MHL over the TI determined in step (1).
- A. Read the Delta FS under the MHL.
- QUESTIONS ????

GRAPHICAL FIRING TABLE (GFT) SETTING

- **Determine data using the Three Step Method:**
- **Charge 4 GB, Range 4830**
- **100/R: 21**
- **Elevation: 323 (+/- 1 mil)**
- **FS M582: 18.3 (+/- 0.1)**

- **Drift: L 6**
- **VT time: 19.0**
- **Time of Flight: 19**

- **DFS: 0.12**

GRAPHICAL FIRING TABLE (GFT) SETTING

- **The limits that a One- Plot GFT setting will yield accurate solutions are indicated by the red numbered elevations. Charge 4 GB Elevation 103 - 650 mils.**

- **The Deflection limits are 400 mils, Left and Right, of the Direction for which the corrections were determined to a Range of 10,000 Meters.**

- **At the Ranges greater than 10,000 Meters - the limits are 4000 Meters, Left and Right, of the center deflection.**

GRAPHICAL FIRING TABLE (GFT) SETTING

- **Two Plot GFT Setting - if time allows for the computation of a second GFT Setting, more accurate fire may result.**
- **Both GFT Settings are applied to create a Two-Plot GFT Setting.**
- **GFT E, CHG 4, LOT A/G, RG 2700, EL 150, TI 9.4**
  TOTAL DF CORR L 3, GFT DF CORR 0
- **GFT E, CHG 4, LOT A/G, RG 6020, EL 260, TI 22.5**
  TOTAL DF CORR L 5, GFT DF CORR R 2
- **Record the GFT Settings**

GRAPHICAL FIRING TABLE (GFT) SETTING

- Apply a Two Plot GFT Setting.
- Place the MHL over the range at 2700
- Place a Blue dot over the Elevation, 150
- Place the MHL over the range at 6020
- Place a Blue dot over the Elevation, 360
- Draw the EGL through the dots and label EL
- Place the MHL over the range at 2700
- Place a Red dot over the FS, 9.4
- Place the MHL over the range at 6020
- Place a Red dot over the FS, 22.5
- Draw the TGL through the dots and label TI
- Average the Tot DF Corr, L 4 and the GFT DF Corr, RI
- Record the Total in upper Left corner and Circle and the GFT in the upper Right.

GRAPHICAL FIRING TABLE (GFT) SETTING

- Chg 4 GB, Range 5480
- EL: 321
- FS M582: 20.1
- 100/R: 19
- DRIFT: L 6
- TOF: 19
- VT: 19.0
- DFS: 0.10
- Deflection limits for a Two-Plot GFT Setting are determined the same as for a One-Plot GFT Setting. The Range Transfer Limits are only GOOD Between the two ranges.

GRAPHICAL FIRING TABLE (GFT) SETTING

- **Multi-Plot GFT Setting - if time allows the computation of a addition GFT Settings, the range transfer can be eliminated.**
- **Three or more GFT Settings are applied to create a Multi-Plot GFT Setting. Record the GFT Settings**

- **GFT E, CHG 4, LOT A/G, RG 2550, EL 143, TI 8.2**
  TOTAL DF CORR L 5, GFT DF CORR L 3

- **GFT E, CHG 4, LOT A/G, RG 3720, EL 229, TI 13.1**
  TOTAL DF CORR L 7, GFT DF CORR L 3

- **GFT E, CHG 4, LOT A/G, RG 5580, EL 378, TI 20.5**
  TOTAL DF CORR L 5, GFT DF CORR R 3

GRAPHICAL FIRING TABLE (GFT) SETTING

- Apply a Multi-Plot GFT Setting.
- Place the MHL over each range
- Place a Blue dot over each Elevation
- Draw the EGL by connecting the dots and label EL
- Place the MHL over each range
- Place a Red dot over each FS
- Draw the TGL by connecting the dots and label TI
- Average the Tot DF Corr, L 6 and the GFT DF Corr, L I
- Record the Total in upper Left corner and Circle and the GFT in the upper Right.

GRAPHICAL FIRING TABLE (GFT) SETTING

- Determine Data for a Multi-Plot the same as One-Plot
- Chg 4 GB, Range 4570
- EL: 292
- FS M582: 16.4
- 100/R: 23
- DRIFT: L 6
- TOF: 18
- VT: 17.0
- DFS: 0.13
- Deflection limits for a Multi-Plot GFT Setting are determined the same as for a One-Plot GFT Setting. The Range Transfer Limits are the length of the GFT.

APPLY REGISTRATION CORRECTIONS TO TFT DATA

- Registration Corrections can also be applied to TFT firing data by applying Range and Fuze K. These are proportions of correction compared to TFT data.
- GFT E, CHG 4, LOT A/G, RG 4510, EL 297, TI 16.9
- RG K = RG @ ADJ EL 4900
- CHT RANGE 4510 = 1.0865
- FZ K = ADJ FS 16.9
- FS @ ADJ EL 17.9 = 0.9441
- To determine the firing data, multiply the Chart Range by Range K and enter the TFT with corrected range (accuracy of 10 meters) Chart 4100 X 1.0865 = TFT Entry Range 4450
- Interpolate the Elevation: 264
- Multiply the FS @ EL 264: 15.9 X (FZ K) .9441 = 15.0 this is the FS to fire

TFT and GFT Methods of Determining Firing Data

QUESTIONS ????

THE COMPUTATION OF FIRING DATA IS THE BASIC TASK OF THE FIRE DIRECTION CENTER. SUCCESSFUL APPLICATION OF THE TASKS TAUGHT HERE WILL HELP INSURE THE FDC's ABILITY TO PROVIDE ACCURATE AND TIMELY FIRES.

TAKE A 10 MINUTE BREAK